LISTING OF THE CLAIMS

The following listing of claims is unchanged and remains pending in the present application.

LISTING OF CLAIMS

1. (previously presented) A video encoding method for assigning a plurality of images to a plurality of GOPs and encoding images belonging to the GOPs as a video image, the method comprising:

a GOP encoding determination step in which:

if it is determined that each image belonging to a given GOP can be generated on a decoding side without using encoded data of a relevant image, it is determined that the relevant image is not encoded and no encoded data thereof is output; and

if it is determined that each image belonging to the given GOP cannot be generated on a decoding side unless encoded data of the relevant image is used, then it is determined that the relevant image is encoded and the encoded data thereof is output;

a GOP encoding/non-encoding data encoding step of encoding GOP encoding/non-encoding data for indicating whether the encoded data of the image belonging to the given GOP is output; and

an in-GOP image encoding step of encoding the image belonging to the given GOP when the encoded data of the image is output.

2. (original) A video encoding method in accordance with claim 1, wherein:

the GOP encoding determination step includes determining whether an image generated by using one or more other GOPs without decoding the encoded data of the relevant GOP is closer to an original image of the relevant image in comparison with an image obtained by decoding the encoded data, so as to determine whether the image belonging to the relevant GOP is to be encoded.

3. (original) A video encoding method in accordance with claim 1, further comprising:

a generation reference-GOP encoding step of encoding generation reference-GOP designating data for designating one or more other GOPs which are used for generating the image belonging to the relevant GOP when the encoded data of this image is not output.

4. (original) A video encoding method in accordance with claim 1, further comprising:

a generation data encoding step of encoding generation data for designating an image generation method which is used for generating the image belonging to the relevant GOP when the encoded data of this image is not output.

5. (previously presented) A video decoding method for decoding encoded data generated by assigning a plurality of images to a plurality of GOPs and encoding images belonging to the GOPs as a video image, the method comprising:

a GOP encoding/non-encoding data decoding step of decoding GOP encoding/non-encoding data for indicating whether the encoded data of each image belonging to each GOP is to be decoded; and

an in-GOP image decoding step in which:

if the GOP encoding/non-encoding data indicates that the encoded data of a relevant image is to be decoded, the relevant image is decoded by decoding the encoded data; and

if the GOP encoding/non-encoding data indicates that the encoded data of the relevant image is not to be decoded, the relevant image is decoded by using an image generation method which does not use the encoded data of this image.

6. (original) A video decoding method in accordance with claim 5, further comprising:

a generation reference-GOP decoding step of decoding generation reference-GOP designating data for designating one or more other GOPs which are used for generating the image belonging to the relevant GOP when the encoded data of this image is not decoded.

7. (previously presented) A video decoding method in accordance with claim 5, further comprising:

a generation data decoding step of decoding generation data for designating the image generation method which is used for generating the image belonging to the relevant GOP when the encoded data of this image is not decoded.

8. (previously presented) A video encoding apparatus for assigning a plurality of images to a plurality of GOPs and encoding images belonging to the GOPs as a video image, the apparatus comprising:

a GOP encoding determination part in which:

if it is determined that each image belonging to a given GOP can be generated on a decoding side without using encoded data of a relevant image, the GOP encoding determination part determines that the relevant image is not encoded and no encoded data thereof is output; and

if it is determined that each image belonging to the given GOP cannot be generated on a decoding side unless encoded data of the relevant image is used, then the GOP encoding determination part determines that the relevant image is encoded and the encoded data thereof is output;

a GOP encoding/non-encoding data encoding part for encoding GOP encoding/non-encoding data for indicating whether the encoded data of the image belonging to the given GOP is output; and

an in-GOP image encoding part for encoding the image belonging to the given GOP when the encoded data of the image is output.

9. (original) A video encoding apparatus in accordance with claim 8, wherein:

the GOP encoding determination part determines whether an image generated by using one or more other GOPs without decoding the encoded data of the relevant

GOP is closer to an original image of the relevant image in comparison with an image obtained by decoding the encoded data, so as to determine whether the image belonging to the relevant GOP is to be encoded.

10. (original) A video encoding apparatus in accordance with claim 8, further comprising:

a generation reference-GOP encoding part for encoding generation reference-GOP designating data for designating one or more other GOPs which are used for generating the image belonging to the relevant GOP when the encoded data of this image is not output.

11. (original) A video encoding apparatus in accordance with claim 8, further comprising:

a generation data encoding part for encoding generation data for designating an image generation method which is used for generating the image belonging to the relevant GOP when the encoded data of this image is not output.

12. (previously presented) A video decoding apparatus for decoding encoded data generated by assigning a plurality of images to a plurality of GOPs and encoding images belonging to the GOPs as a video image, the apparatus comprising:

a GOP encoding/non-encoding data decoding part for decoding GOP encoding/non-encoding data for indicating whether the encoded data of each image belonging to each GOP is to be decoded; and

an in-GOP image decoding part in which:

if the GOP encoding/non-encoding data indicates that the encoded data of a relevant image is to be decoded, the in-GOP image decoding part decodes the relevant image by decoding the encoded data; and

if the GOP encoding/non-encoding data indicates that the encoded data of the relevant image is not to be decoded, the in-GOP image decoding part decodes the relevant image by using an image generation method which does not use the encoded data of this image.

13. (original) A video decoding apparatus in accordance with claim 12, further comprising:

a generation reference-GOP decoding part for decoding generation reference-GOP designating data for designating one or more other GOPs which are used for generating the image belonging to the relevant GOP when the encoded data of this image is not decoded.

14. (previously presented) A video decoding apparatus in accordance with claim 12, further comprising:

a generation data decoding part for decoding generation data for designating the image generation method which is used for generating the image belonging to the relevant GOP when the encoded data of this image is not decoded.

15. (cancelled)

16. (previously presented) A computer-readable storage medium storing a video encoding program for making a computer execute a process used for implementing the video encoding method in accordance with claim 1.

17. (cancelled)

18. (previously presented) A computer-readable storage medium storing a video decoding program for making a computer execute a process used for implementing the video decoding method in accordance with claim 5.